being unpatentable over AGARWAL view of LIU et al. and PARK (U.S. Patent No. 5,386,241). The Examiner rejected claims 2, 3, 6 and 7 under 35 U.S.C. § 103(a) as being unpatentable over AGARWAL in view of LIU et al. and in further view of MALLADI et al. (U.S. Patent No. 5,818,532). Applicant respectfully traverses these rejections, at least for the reasons stated below.

The Examiner rejected claims 1-8, which are generally directed to reducing the amount of processing on decoded video data, and claims 9-13, which are generally directed to reducing the number of coefficients inverse quantized and inverse DCT transformed by setting the coefficients to alternate values. With respect to all of the rejections, the Examiner relied on AGARWAL to teach the concept of "throttling." However, AGARWAL discusses throttling only in the context of controlling decoding by manipulating the encoding process. In particular, the discussion of throttling in AGARWAL provides that "decode rate control may be used to throttle back the video decode bandwidth." See col. 28, lines 3-4. AGARWAL defines the term "decode rate control" as the "ability to select, *during encode processing*, the level of processing bandwidth required for playback . . . ." See col. 27, lines 50-52 (emphasis added). AGARWAL goes on to describe how the encoding process affects the bandwidth and quality of the decoded image:

> Decode rate control provides *a user of encoding system* 100 with the ability to design an encoded bitstream for a target playback system. Decode rate control also provides *the user of encoding system* 100 with the ability to trade off CPU usage for video quality for a given playback system.

Col. 27, lines 57-61 (emphasis added). In other words, AGARWAL teaches throttling a decode bandwidth using a level of processing bandwidth selected during the encoding process.

In contrast, the present application does not propose or require any type of control over the

encoding process, only of the decoding process. In other words, the throttling occurs at the decoding stage, without consideration of previously encoded throttling instructions, thus providing increased flexibility. In order to clarify that the invention functions independently of encoded throttling criteria, independent claims 1, 5, 9 and 12 have been amended to recite that the throttling does not require encoded throttling control data. Accordingly, withdrawal of the rejections based on any combination including the AGARWAL reference is respectfully requested.

Applicant respectfully submits that the amendments to claims 1, 5, 9 and 12 do not substantially affect or narrow the scope of these claims, which had already recited basing the throttling amount on at least one of two indicia (a measure of computational processing power required to decode a bitstream and a measure of the decoder's processing capabilities) that arise from the decoding process, not the encoding process.

Furthermore, with respect to claims 1 and 5, the Examiner relied on AGARWAL to teach controlling computational processing by reducing an amount of processing performed on the decoded video data. However, the Examiner did not cite any particular portion of AGARWAL to support his rejection and Applicant submits that AGARWAL does not teach or suggest this feature of the present invention in the claimed combination. (Moreover, the rejection is inconsistent with the Examiner's position in the parent application, 09/168,852, in which the Examiner admitted that AGARWAL did not teach controlling computer processing by reducing the amount of processing performed on decoded video data. See Official Action (September 22, 1999), paper 7, p.7.)

Also, with respect to independent claims 9 and 12, the Examiner admitted that the combination of AGARWAL and LIU et al. does not teach reducing the number of coefficients

inverse quantized and inverse DCT transformed *by selectively setting coefficients to alternate values*. The Examiner therefore relied on PARK to teach this aspect of the invention. Although the portion of PARK cited by the Examiner generally addresses reducing the number of transform coefficients, it does not specifically teach setting the coefficients to alternate values. Rather, PARK teaches merely deleting DCT transform coefficients to reduce the number of transform coefficients. See col. 8, lines 12-19.

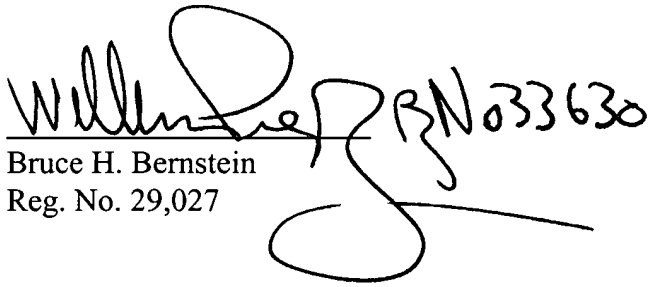
For at least the reasons stated above, Applicant respectfully submits that independent claims 1, 5, 9 and 12 have been shown to be allowable. With regard to claims 2-4, 6-8, 10-11 and 13, Applicant asserts that they are allowable at least because they depend from independent claims 1, 5, 9 and 12, respectively.

In view of the herein contained amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of previously asserted rejections set forth in the Official Action of January 30, 2003, together with an indication of the allowability of all pending claims, in due course. Such action is respectfully requested and is believed to be appropriate and proper.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attached thereto.

Should the Examiner have any questions concerning this Amendment or the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,
William Brent WILSON



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MARKED UP COPY OF CLAIMS

1. (Amended) A method of reducing processing power requirements of a video decoder that receives and decodes incoming video data, the method comprising:

determining a throttling amount [based on], using at least one of a measure of computational processing power required to decode at least one bitstream of the video data and a measure of the decoder's processing capabilities, without requiring encoded throttling control data associated with the video data; and

controlling computational processing requirements of the decoder, based on the throttling amount, comprising reducing an amount of processing performed on the decoded video data prior to displaying a picture comprising the decoded video data.

5. (Amended) A system for dynamically processing incoming video data comprising:

a video decoder that receives and decodes the video data; and

a decoder throttling device that determines a throttling amount [based on], using at least one of a measure of computational processing power required to decode the video data and a measure of a processing capability of the decoder, without requiring encoded throttling control data;

wherein the decoder throttling device provides the throttling amount to the decoder, which reduces an amount of processing performed on the decoded video data prior to displaying a picture comprising the decoded video data, in accordance with the throttling amount.

9. (Amended) A method of reducing processing power requirements of a video decoder that receives and decodes incoming video data, the method comprising:

determining a throttling amount [based on], using at least one of a measure of computational

processing power required to decode at least one bitstream of the video data and a measure of the decoder's processing capabilities, without requiring encoded throttling control data associated with the video data; and

controlling computational processing requirements of the decoder, based on the throttling amount, comprising reducing a number of coefficients inverse quantized and inverse DCT transformed by selectively setting coefficients to alternate values.

12. (Amended) A system for dynamically processing incoming video data comprising:

a video decoder that receives and decodes the video data; and

a decoder throttling device that determines a throttling amount [based on], using at least one of a measure of computational processing power required to decode the video data and a measure of a processing capability of the decoder, without requiring encoded throttling control data;

wherein the decoder throttling device provides the throttling amount to the decoder, which reduces a number of coefficients inverse quantized and inverse DCT transformed by selectively setting coefficients to alternate values, in accordance with the throttling amount.